WHAT IS CLAIMED IS:

1. A method of reducing cross-contamination of an assay reagent solution, the method comprising:

contacting a solid support with a first reagent solution

removing the solid support from contact with the first reagent solution; and

contacting the solid support with a second reagent solution;

wherein cross-contamination of the second reagent solution by the first reagent solution is reduced by coating the solid support with a non-stick material prior to contacting the solid support with a first reagent solution.

2. The method of claim 1, wherein the solid support is contacted with one or more intermediate reagent solutions prior to contacting the solid support with the second reagent solution.

3. The method of claim 2, wherein the intermediate solution comprises a wash solution.

4. The method of claim 1, wherein the solid support is removed from a first container that contains the first reagent solution and placed in a second container that contains the second reagent solution.

5. The method of claim 4, wherein the first container and the second container are wells of a microtiter plate.

6. The method of claim 4, wherein the solid support is selected from the group consisting of a prong, a dipstick, a glass bead, and a magnetic particle.

7. The method of claim 1, wherein the solid support comprises a container and the first reagent solution is removed from the container and the second reagent solution is placed into the container.

8. The method of claim 7, wherein one or more intermediate solutions is placed into the container after removing the first reagent solution and prior to placing the second reagent into the container.

9. The method of claim 7, wherein the solid support is selected from the group consisting of: a microtiter plate, a tube, a silicon chip, and a slide.

10. The method of claim 1, wherein the solid support comprises a capture reagent which specifically binds to a target analyte.

11. The method of claim 1, wherein the first reagent solution comprises a denaturant.

12. The method of claim 11, wherein the denaturant is selected from the group consisting of a chaotropic agent and a detergent.

SUB A1

13. The method of claim 1, wherein the non-stick coating material is selected from the group consisting of silane, dimethylchlorosilane and Gel Slick™.

14. The method of claim 1, wherein the second reagent solution comprises a substrate which produces a detectable product when contacted with an enzyme linked to a signal reagent.

15. A method of detecting a target analyte in a test sample, the method comprising:

contacting a test sample with a solid support which comprises a capture reagent that binds to the target analyte, wherein the solid support is coated with a non-stick coating material prior to contacting the sample;

contacting the solid support with a signal reagent which binds to the target analyte; and

determining whether the test sample contains the target analyte by detecting the presence of signal reagent immobilized on the solid support.

16. The method of claim 15, wherein the non-stick coating material is a silanizing agent.

17. The method of claim 15, wherein the non-stick coating material is selected from the group consisting of silane, dimethylchlorosilane and Gel Slick™.

18. The method of claim 15, wherein the test sample comprises a denaturant.

19. The method of claim 18, wherein the denaturant is selected from the group consisting of a chaotropic agent and a detergent.

20. The method of claim 15, wherein the solid support is coated with the non-stick coating material after the capture reagent is attached to the solid support.

21. The method of claim 15, wherein the capture reagent is attached to the solid support prior to contacting the test sample with the solid support.

22. The method of claim 15, wherein the capture reagent is attached to the solid support simultaneously with contacting the test sample with the solid support.

23. The method of claim 15, wherein the method further comprises washing the solid support prior to contacting the solid support with the signal reagent.

24. The method of claim 15, wherein the method further comprises washing the solid support prior to detecting the presence of signal reagent.

25. The method of claim 15, wherein the solid support is selected from the group consisting of a dipstick, a bead, a magnetic particle, a centrifuge tube, and a glass slide.

26. The method of claim 15, wherein the capture reagent is covalently attached to the solid support.

27. The method of claim 15, wherein the capture reagent is noncovalently attached to the solid support.

28. The method of claim 27, wherein the capture reagent comprises a tag which binds to a tag binder attached to the solid support.

29. The method of claim 28, wherein the tag is biotin and the tag binder is selected from the group consisting of avidin, streptavidin, and an antibody that binds to biotin.

30. The method of claim 28, wherein the capture reagent comprises an antibody and the tag binder is selected from protein A, protein G, and an antibody that binds to the capture reagent.

31. The method of claim 15, wherein the target analyte comprises a polynucleotide and the capture reagent comprises an oligonucleotide which hybridizes to the polynucleotide.

32. The method of claim 31, wherein the polynucleotide is DNA or RNA.

33. The method of claim 31, wherein the signal reagent comprises a detectable label attached to an oligonucleotide which hybridizes to the polynucleotide.

34. The method of claim 31, wherein the signal reagent comprises a detectable label attached to an antibody which specifically binds to double stranded nucleic acids.

35. The method of claim 31, wherein the polynucleotide is amplified prior to contacting the sample with the capture reagent.

SUB A3

36. The method of claim 35, wherein the polynucleotide is amplified by a procedure selected from the group consisting of polymerase chain reaction, ligase chain reaction, strand displacement amplification, transcription mediated amplification, and NASBA.

37. The method of claim 31, wherein the denaturant is selected from the group consisting of guanidine, sodium thiocyanate, urea, and lithium TCA.

38. The method of claim 15, wherein the capture reagent comprises an antibody which binds to the target analyte.

39. The method of claim 15, wherein the signal reagent comprises an antibody which binds to the target analyte.

40. The method of claim 15, wherein the signal reagent comprises a detectable label.

41. An apparatus for detecting a target analyte, the apparatus comprising a solid support attached to a capture reagent which binds to the target analyte, wherein the solid support is coated with a non-stick coating material.

42. The apparatus of claim 41, wherein the non-stick coating material is a silanizing agent.

SUB A4

43. The apparatus of claim 42, wherein the silanizing agent is selected from the group consisting of silane, dimethylchlorosilane and Gel Slick™.

44. The apparatus of claim 41, wherein the solid support is selected from the group consisting of a prong, a dipstick, a glass bead, and a magnetic particle.

45. The apparatus of claim 41, wherein the capture reagent is noncovalently attached to the solid support.

46. The apparatus of claim 41, wherein the capture reagent comprises an oligonucleotide which hybridizes to a polynucleotide which comprises the target analyte.

47. The apparatus of claim 41, wherein the capture reagent comprises an antibody which binds to the target analyte.